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AMENDED CLAIMS

1. Process for inking a printing plate attached to a holder, with a thermoplastic ink, to be used in pad printing, whereby a relative movement is maintained between the holder and an ink tank filled with thermoplastic ink, characterised in that the holder or the ink tank, or both these components are heated at the temperature required for the thermoplastic ink, wherein the ink is heated to about 80°C.
2. Process according to claim 1, characterised in that as an ink tank, a heated ink tank is used, with circular or oval doctor blade of a hard material, such as hard metal or plastic material in the shape of a monolithic component of undeformable material, in which at the periphery a circular or oval canal is made for attaching above said doctor blade by snap connection, as well as for attaching above said doctor blade to this component by glueing.
3. Process according to claim 1, characterised in that as an ink tank, a device is used consisting of the combination of a heated ink tank and at least one doctor blade, of which at least the bottom edge which is contacting the printing plate; is adjusted with respect to the printing plate at a negative angle, measured with respect to the inked portion of the printing plate to be scraped off, and without changing the position of the doctor blade, a relative movement of the doctor blade with respect to the printing plate is generated, on the one hand, in a direction to ink the printing plate, and on the other hand, in the other direction, to scrap off the ink from the printing plate.
4. Ink tank to be used in the application of the process according to claim 2, characterised in that it is heatable being provided with circular or oval doctor blade of hard material, such as hard metal or plastic material, and in that it is realised in the shape of a monolithic component of an undeformable material, in which, at the periphery a circular or oval canal is made for attaching above said doctor blade by

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snap connection, as well as for attaching above said doctor blade to this component by glueing.

5. Ink tank according to claim 4, characterised in that above said hard material is a synthetic substance.

6. Ink tank according to claim 5, characterised in that above said synthetic substance is a polyacetate.

~~A 16~~ 7. Ink tank according to any one of claims 5 and 6, characterised in that above said doctor blade of above said synthetic substance is attached by an adhesive.

8. Ink tank according to claim 4, characterised in that above said doctor blade of above said synthetic substance is attached to the monolithic component by a snap connection.

~~A 20~~ 9. Ink tank according to any one of claim 4-6, characterised in that above said doctor blade, during spraying or casting of above said synthetic substance of which above said ink tank is made, was joined to it.

10. Heatable ink tank for implementing the process according to claim 3, characterised in that it consists of the combination of

a) an ink tank for inking the printing plate during a relative movement of the printing plate with respect to this ink tank, and of

b) at least one doctor blade of which the bottom edge which is contacting the printing plate, is adjusted with respect to the printing plate at a negative angle, meaning an angle measured with respect to the inked portion of the printing plate that has yet to be scraped off.

11. Ink tank according to claim 10, characterised in that above said doctor blade is adjusted at a negative angle between substantially 90 and substantially 180°.

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~~A3~~ 12. Ink tank according to any one of claims 10 and 11, characterised in that it is elongated and forms with above said doctor blade an elongated ink gap.

5 13. Ink tank according to claim 12, characterised in that above said doctor blade and the ink tank are mounted on a common elongated housing.

14. Ink tank according to claim 13, characterised in that above said doctor blade and above said elongated housing form a whole.

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15. Ink tank according to any one of claims 10-14, characterised in that two doctor blades are mounted facing each other.

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16. Ink tank according to any one of claims 10-15, characterised in that above said doctor blade forms a closed circle and that a portion of the doctor blade extends according to above said negative angle.

17. Ink tank according to any one of claims 13-16, characterised in that above said housing, a heating resistance is mounted.

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